823. Special Surgery
Spring. (3-1-0) May re-enroll for a maximum of 8 credits. Approval of department.
Surgical technique and tissue reactions following surgery in small animals.

825. Advanced Anesthesiology
Winter. (4-2-2) Approval of department.
Principles of drug action pertaining to anesthetics will be discussed including respiratory and cardiovascular effects of inhalation and intravenous agents. Anesthetic techniques for various animal species will be presented.

826. Cardiology
Fall. (3-2-4) Approval of department.
Study recent advances in veterinary cardiology. Includes electrocardiology, congenital and acquired diseases, cardiac catheterization and surgery.

899. Research
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 18 credits. Approval of department.
Research on thesis problems.

SOCIAL SCIENCE

University College

Students may earn credit in only one of the courses in each of the following three groups:

1. 201, 211, 231, 241
2. 202, 212, 222, 242
3. 203, 213, 223, 243

100. Personal Decision Making and Public Policy
Spring. (4-4-0)
Public policy and decision-making processes. Effects of policy on the quality of life. Development of descriptive and prescriptive social science skills. Improving the policy-making process.

201. Americans and Their Values
(231A.) Fall, Winter, Spring, Summer. (4-4-0)
Processes by which individuals are socialized to the prevailing patterns of behavior by such agencies as family, school, peer groups, mass media and church. Part played by each in the development of personality.

202. Power in America
(232A.) Fall, Winter, Spring, Summer. (4-4-0) 201 preferred; or 211, 221, or 241.
Problems of regulating and controlling human behavior. Emphasis placed on major economic and political institutions involved in social control. This includes problems of human wants and needs.

203. A Peaceful World
(233A.) Fall, Winter, Spring, Summer. (4-4-0) 202 preferred; or 212 or 222, or 242.
The international scene with the focus on problems of economic development, conflict among the nation-states and attempts at conflict control.

211. The Emergence of Man
(231B.) Fall, Winter, Spring, Summer. (4-4-0)
The bio-social evolution of man. The theories and empirical findings of the behavioral sciences are brought to bear upon the nature of man.

212. Coping with Changing Institutions in Modern Society
(232B.) Fall, Winter, Spring. 4(4-0) 211 preferred; or 201, 231, or 241.
Individuals and the changing institutional framework of modern society. Emphasis on socialization enabling personality systems in different cultural settings to cope with life in the future.

213. Casualties of Contemporary Society
Fall. (233B.) Fall, Winter, Spring. 4(4-0) 212 preferred; or 202, 222, or 242.
The meaning of deviant behavior and personal disorganization and their impact on society. Selected problems examined in depth.

1DC. The Politics of Ecology
For course description, see Interdisciplinary Courses.

221. The Changing American Metropolis: Ecology of the Urban Community
Fall, Winter, Spring, Summer. (4-4-0)
Factors and directions in urban change. Impacts on life styles and life strategies of urban groups. Challenges to traditional family, educational, and community patterns.

222. Work and Politics in Urban America
(231C.) Fall, Winter, Spring, Summer. (4-4-0) 211 preferred; or 201, 211, 241.
Changing patterns of economic and political participation. Issues of employment security and job satisfaction. Distribution of economic rewards, political power, and civil rights. Intermeshing of economic and political activities.

223. The World's Cities: An Urban Culture and Common Problems
(232C.) Fall, Winter, Spring, Summer. (4-4-0) 222 preferred; or 203, 212, or 242.
The unity of urban life patterns and the emergence of modern-day urban problems. Cultural variations in approach to issues—comparative political, social, economic, ideological systems.

241. Modernization: Political and Social
(231D.) Fall, Winter, Spring, Summer. (4-4-0)
The nature and sources of social cohesion. Approaches to the modernization of traditional societies. Problems and alternative strategies of nation building.

242. Modern Ideologies: Justifications of Political and Economic Power
(232D.) Fall, Winter, Spring, Summer. (4-4-0) 241 preferred; or 201, 211 or 241.
Ideologies of change in the modern world—sources, appeals, problems. Issues of social justice and individual freedom.

243. Revolutionary Change and International Conflict
(233D.) Fall, Winter, Spring, Summer. (4-4-0) 242 preferred; or 202, 212, or 222.
Social tensions and revolutionary change. The causes of war: international conflict and the great powers. Strategies for peace. Man's conscience versus state policies.

300. Supervised Individual Study
Fall, Winter, Spring. 2 to 4 credits. 8 credits completed in the Social Science Department and approval of department.
Selected students requesting individual study of interdisciplinary problems will be supervised by University College professors. Variable elective credit will be determined when the student selects the instructor, adviser, and department approval.

1DC. Modernization: India and Japan
For course description, see Interdisciplinary Courses.

1DC. Modernization: The Middle East
For course description, see Interdisciplinary Courses.

1DC. Far East: Contemporary Issues and Problems
For course description, see Interdisciplinary Courses.

1DC. Refugees, Displaced Persons, Hostages, Exiles
For course description, see Interdisciplinary Courses.

SOCIAL SCIENCE

(COLLEGE OF)

210. Methods of Social Science I
Fall, Winter, Spring, Summer. 4(4-0)
Sophomore.
Characteristics of social science theory and method. Logical and practical aspects of data collection, standard techniques of investigation in the social sciences.

211. Methods of Social Science II
Fall, Winter, Spring, Summer. 4(4-0)
Principles of measurement and scaling. Types of variables. Techniques and problems of sampling. Research design. Role of explanation and of value judgments in social science.

4501. Perspectives in Social Science
(390H.) Fall, Winter, Spring. 4(4-0)
Junior, approval of Honors College. Preference given to majors in Social Science and professional schools of the College of Social Science. Seminars in selected topics in areas of knowledge represented by the social science disciplines and allied professional fields.

470. Selected Topics in Social Science
Winter, Spring. 4(4-0) May re-enroll for a maximum of 8 credits. 18 credits in Social Science.
An interdisciplinary investigation of major theoretical and applied topics in the social sciences, including computer utilization in social science research, and interdisciplinary approaches to contemporary problems. Topics will vary from term to term.

480. Contemporary Social Problems in the United States
Fall, Winter. 4(4-0) May re-enroll for a maximum of 8 credits. 18 credits in Social Science.
Interdisciplinary investigation of selected major social problems of the United States, such as urban redevelopment, environmental control, welfare reform, crime and society, the future of American society.
492. Contemporary Social Problems Abroad
Spring. 4(4-0) 18 credits in social science.
Seminars dealing with major theoretical topics and social problems concerning foreign areas, such as economic and educational development, population explosions, war crises and peacekeeping. A multi-disciplinary approach involving specialists from the social science disciplines and allied professional fields.

490. Individual Research Projects
Fall, Winter, Spring. 4 credits. May re-enroll for a maximum of 8 credits. Multi-disciplinary social science majors and 12 credits in social science, agricultural economics, anthropology, economics, geography, political science, psychology and sociology. Individually supervised study and research on a topic using a multidisciplinary approach.

495. Foreign Area Field Study
Fall, Winter, Spring, Summer. 3 to 15 credits. May re-enroll for a maximum of 24 credits. Juniors and 12 credits in social science. Study in a variety of foreign settings under the guidance of an advisor, such as American University Field Study Centers in Rome and Singapore.

810. Introduction to Linear System Theory
Fall. 3(3-0) MTH 214. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.
A first course in system theory for students from a range of disciplines. Mathematical representation of system variables, transform and state space method of analysis, introduction to control theory, applications to physical, economic and social systems.

811. System Methodology and Simulation
Winter. 3(3-0) 810, STT 441. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.
Problem definition, design of abstract models for system design and control, simulation of systems described by differential and difference equations, generation of random variables, simulation of discrete object stochastic systems, simulation languages, applications to physical, economic and social systems.

999. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of college.

SOCIAL WORK

College of Social Science

205. Contemporary Social Work
Fall, Winter, Spring. 3(3-0)
Role of the social worker in relation to social issues and human needs, social service programs, structures and functions of public and voluntary agencies in a changing society.

228. Marriage
Fall, Winter, Spring. 4(4-0) Students may not receive credit in both 228 and FCS 145.
Examination of marriage and the family, from a social work point of view. Consideration of such areas as adjustment as emotional, physical, social, financial, religious and legal.

322. Child Welfare
Winter. 3(3-0) Juniors; SOC 251 or PSY 245.
Child welfare movement and contemporary children's agencies and their services. Programs for improving home and for substitute care, safety, guardianship, health, employment, delinquency prevention, and other needs of children and youth.

367. Social Services in Selected Settings
Fall, Winter, Spring, Summer. 2(2-2) Junior majors. 205.
Self-instruction laboratory and classroom discussion of social agency programs.

400H. Honors Work
Fall, Winter, Spring, Summer. 1 to 16 credits. Juniors; approval of school.
Study of a problem, phase or field of social work, seminar for particularly able students.

417. Minorities and Women in the World of Work
Fall, Winter, Spring. 4(4-0) Senior majors or approval of department. Interdepartmental with the departments of Management and Race and Ethnic Studies and administered by the Department of Management.
Racial, ethnic, sexual and other minority experiences and problems in the world of work. An awareness training approach (what it's like to be . . .) featuring movies, guests, subgroup discussions and encounter-type exercises.

420. Current Issues in Social Work
Fall, Winter, Spring, Summer. 2(2-2) May re-enroll for a maximum of 6 credits. Seniors; approval of school.
Designed to integrate knowledge of social issues within a social science framework useful for social work. Includes review of selected issues and exploration of their relevance for social work.

428. Dynamics of Marriage and Family Relations
Fall, Winter, Spring. 3(3-0) Juniors.
Analysis of post-marital interpersonal adjustment from standpoint of family social work. Includes current social forces affecting these relationships, and specialized services available to families.

433. Social Work as a Profession I
Fall. 4(3-3) Junior majors; PSY 225; SOC 241.
Social work in relation to development of the individual and his adaptation to his environment. Related laboratory experience.

434. Social Work as a Profession II
Winter. 4(3-2) 433.
Continuation of 433. Human reactions under stress, social work intervention through welfare organizations and social action. Related laboratory experience.

435. Social Work as a Profession III
Spring. 4(3-3) 434.
Continuation of 434. Social welfare programs to meet human needs; social planning for services. Related laboratory experience.

439. Interviewing in Social Welfare
Fall, Winter, Summer. 3(2-2) Junior majors; 433 or PSY 225.
Principles of interviewing as applied to social welfare. Related laboratory experience.

440. Social Work Intervention
Fall, Winter, Spring. 3(2-0) 439.
Intervention related to individuals and families based on application of social work and social science knowledge and utilization of interviewing techniques.

444. Social Work in Corrections
Spring. 3(3-0) 205 or 433 or approval of school.
Introduction to juvenile and adult probation and parole, clinical services in juvenile institutions, and classification in prisons. Intended for students planning to enter corrections field.

Fall, Winter, Spring, Summer. 3 to 12 credits. May re-enroll for a maximum of 24 credits. Approval of school.
Independent study or participation in formal programs outside the United States.

467. Field and Agency Experience
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 16 credits. Senior majors 433 or 434 or 435 concurrently; 440 or concurrently, approval of school.
Individual experience in approved social agencies and institutions. Weekly class. Credit calculated on basis of 30 contact hours per term, per credit.

475. Philosophy and Techniques in Social Work Research
Fall, Winter, Spring. 3(3-0) Junior majors.
Concepts and methodology used for empirical investigation of social work problems including the philosophic basis of scientific investigation, techniques of measurement, research design, data collection, and data analysis.

476. Research Methods in Social Work Intervention
Fall, Winter, Spring. 3(1-4) Senior majors or approval of school.
Experimental analysis of behavior research methods applied to social work. Emphasis on the evaluation of intervention techniques used by social workers with clients. Laboratory research with animals included.

482. Selected Approaches in Social Work
Winter. 2 or 3 credits. May re-enroll for a maximum of 6 credits. Junior majors.

490. Independent Study in Social Work
Fall, Winter, Spring. Variable credit. May re-enroll for a maximum of 12 credits. Third-term Juniors; approval of school.
Each student will work under direction of a faculty member on an experimental, theoretical, or applied problem.